

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

CARRIER CORP.,

Plaintiff,

v.

GOODMAN GLOBAL, INC., GOODMAN
MANUFACTURING COMPANY, L.P.,
GOODMAN GLOBAL HOLDINGS, INC.,
GOODMAN DISTRIBUTION, INC., and
GOODMAN SALES COMPANY,

Defendants.

C.A. No. 12-930-SLR
REDACTED
PUBLIC VERSION

**GOODMAN'S ANSWERING BRIEF IN OPPOSITION TO PLAINTIFF'S MOTION
FOR A PERMANENT INJUNCTION**

OF COUNSEL:

Scott F. Partridge
Paul R. Morico
Elizabeth Durham Flannery
Ali Dhanani
Lisa Maria Thomas
Michelle J. Eber
BAKER BOTTS L.L.P.
One Shell Plaza
910 Louisiana Street
Houston, Texas 77002
(713) 229-1569

Frederick L. Cottrell, III (#2555)
Jason J. Rawnsley (#5379)
RICHARDS, LAYTON & FINGER, P.A.
920 North King Street
Wilmington, DE 19801
(302) 651-7700
cottrell@rlf.com
rawnsley@rlf.com

*Attorneys for Defendants Goodman Global,
Inc., Goodman Manufacturing Company,
L.P., Goodman Global Holdings, Inc.,
Goodman Distribution, Inc., & Goodman
Sales Company*

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I. INTRODUCTION

Carrier's motion ignores the essential factors and evidence that are most critical to whether the extraordinary remedy of a permanent injunction is warranted. It is also based on a fluid record in this Court (post-trial motions) and a contrary record in the U.S. PTO (the rejection of Carrier's patent).

Lacking evidence to support injunctive relief, Carrier offers only unsupported argument, and assumes that a finding of infringement by Goodman can substitute for analysis of the marketplace in which Carrier, Goodman, and others compete. Carrier thus ignores the most pertinent facts — namely, that the HVAC market is crowded with competitors other than Carrier and Goodman; that those competitors have similar communicating and self-configuring systems; that Carrier has done nothing to assert market exclusivity against those other competitors; that Carrier has not shown any lost sales or dealers to Goodman; that Carrier has evinced no evidence that injunctive relief would accrue to its benefit as opposed to shifting sales to other competitors (at consumer expense); that Carrier sat on its rights for three years before filing suit and five years before seeking injunctive relief against Goodman alone; and that the U.S. PTO has rejected Carrier's patent claims as unpatentable several times over.

By skipping past those facts, Carrier seeks to obtain an injunction as a matter of course. That is what the Supreme Court rejected in *eBay, Inc. v. MercExchange, L.L.C.*, 547 U.S. 388 (2006). As the Supreme Court has cautioned, an “injunction is a drastic and extraordinary remedy, which should not be granted as a matter of course.” *Monsanto Co. v. Geertson Seed Farms*, 561 U.S. 139, 142 (2010). But Carrier's motion reduces to the claim that Carrier should receive an injunction simply because Carrier and Goodman compete in the same (crowded) marketplace. When the relevant facts are considered, Carrier's motion fails as a matter of law as well as equity.

Given Carrier's decision to avoid developing arguments and case law specific to the facts of this case, Carrier's opening brief reads like a placeholder so Carrier can address the pertinent facts and evidence in reply. But an opening brief must establish the entitlement to relief requested; if it does not, the motion should be denied. *See* D. Del. L.R. 7.1.3(c)(2) (party "shall not reserve material for the reply brief which should have been included in a full and fair opening brief"). The record properly before the Court demonstrates why an injunction should not be granted — Carrier has not been irreparably harmed, monetary damages would likely be adequate, the balance of hardships tips in Goodman's favor, and the public interest is at best neutral if not in Goodman's favor. Certainly, Carrier has not met its burden of showing those factors favor the extraordinary remedy of permanent, injunctive relief.

II. NATURE AND STAGE OF THE PROCEEDINGS

Carrier filed this lawsuit on July 19, 2012 asserting direct infringement of two patents (the '004 and U.S. Patent No. 7,777,452 ("the '452 Patent")), and later amended its lawsuit on February 5, 2013 to assert inducement. (D.I. 1 and D.I. 51). The Court entered the parties' agreed proposed scheduling order which bifurcated damages and willfulness from the liability phase, and postponed discovery regarding "the possibility of injunctive relief" for the willfulness and damages phase of the case. D.I. 27 at para. 2(b).

After litigating the '452 patent for nearly two years, Carrier dropped that patent with prejudice. D.I. 273. On the eve of trial, Carrier dropped all asserted claims of the '004 Patent except claims 6, 8 and 13. A five-day trial commenced on September 8, 2014. The Court submitted infringement and validity to the jury, which returned a verdict for Carrier. D.I. 384. The Court entered judgment consistent with that verdict on September 17, 2014. D.I. 390. On September 30, 2014 the Court entered a scheduling order for post-trial briefing. D.I. 391.

III. STATEMENT OF FACTS

A. Carrier's and Goodman's Products

Carrier contends that it conceived the invention of the '004 Patent and reduced it to practice no earlier than January 7, 2003. DTX 325 at 3. It launched the Infinity System a year later in January 2004. D.I. 401 at 202:10-11. Carrier contends that its Infinity System practices asserted claims 6, 8, and 13 of the '004 Patent. D.I. 404 at 1166:4-21.¹ Also in January 2004, Carrier filed the application leading to the '004 Patent. PTX 1. The '004 Patent issued approximately three and a half years later on July 10, 2007. *Id.* While Carrier supplied specification sheets and other documentation with the Infinity system products since their launch in 2004 (*see* PTX 392), the record does not reflect any notice to the public of Carrier's '004 Patent in Carrier's published materials until a May 2012 Infinity product data sheet.² PTX 530. In earlier versions of the same document going back to 2007, Carrier did not identify the '004 Patent. *See, e.g.*, DTX 454, DTX 455, DTX 456.

In 2005, Emerson approached Goodman about developing a communicating thermostat and communicating control boards for Goodman's indoor and outdoor units. DTX 10. Goodman and Emerson invested significant time and money in developing these communicating products. Ex. 13 (Vogel Depo. Tr.) at 156:12-159:23; Ex. 12 (ECT_002044) at 2055-56.³ Goodman introduced its first communicating thermostat (the CTK01) in November 2009. PTX 35. Goodman later released other thermostats, the CTK02 (also manufactured by Emerson) and CTK03 (manufactured by Honeywell) in 2011 and 2012, respectively. D.I. 403 at 714:21-25; Ex.

¹ Carrier, however, has not offered sufficient evidence to show that the Infinity system practices the asserted claims of the '004 Patent. D.I. 397 at 16.

² Carrier produced a 2010 document marked highly confidential in this litigation that identified the '004 Patent, but that document was not one that Carrier distributed to the general public. PTX 538. Rather, it apparently was limited to installers of Carrier systems. *Id.*

³ Unless otherwise noted, all exhibits referenced herein as "Ex." are exhibits to the Declaration of Paul Morico, filed concurrently hereto.

16 (Goodman Product Marketing News for CTK02) at GOODMAN-CAR00012508; Ex. 17 (Goodman Product Marketing News for CTK03) at GOODMAN-CAR00259981. Goodman's communicating thermostats and its indoor and outdoor units with communicating boards were sold under the ComfortNet trade name. D.I. 309 (Pretrial Order) at Ex. 1 at 2-3. All of Goodman's communicating thermostats and communicating control boards were designed, developed and manufactured by Emerson and Honeywell, which sell competing brands of communicating thermostats and control boards to the HVAC industry generally. D.I. 402 at 391:3-7, 393:2-7, 556:20-557:3; D.I. 403 at 700:3-17, 713:14-714:13.

Goodman's collaboration with Emerson utilized earlier Emerson technology — for example, the use of the existing four wires already present in customers' homes as the communication wires. That allowed dealers to install high-end systems more easily. DTX 10 at GOODMAN-CAR00127227-28; PTX 699 at GOODMAN-CAR00126136; PTX 8 at GOODMAN-CAR00112174. Alternative systems used dedicated wires for each type of signal, which required as many as 11 wires in some units. Ex. 25 (Shah Depo. Tr.) at 77:8-78:17, 159:25-160:14. Communicating systems, on the other hand, could send any information back and forth between the thermostat and HVAC units over the set of four wires that most homes had already. *Id.* Using the existing four wires for serial communications made it easier to have a number of features, including diagnostics, feedback at the thermostat, variable speed control of motors, self-configuration, and other features. PTX 699 at GOODMAN-CAR00126140, 142, 144, 162, and 188. Those "serial communications" across the existing four wires were used by Emerson's patented Varitech system released in 1992. Ex. 6 (Pham Depo. Tr.) at 35-38, 70; DTX 95 at 3:8-10 ("The communications link eliminates the need to run a bundle of wires between indoor and outdoor units."). The use of a communicating system that operated over the existing

four wire connections between a thermostat and the indoor/outdoor units to simplify installation of premium HVAC systems thus was not a Carrier contribution to the industry.

Four-wire communications technology is not covered by the asserted claims of the '004 Patent. Most of the evidence Carrier relies on in its background facts concerning Goodman's reasons for the ComfortNet project does not concern auto-configuration, but instead concerns implementing this four-wire communications. *See* PTX 29 at GOODMAN-CAR00016504 ("dealers will have the option to perform installations using a 4-wire bus just like Infinity").

Self-configuration is just one of many features found in Goodman's ComfortNet products (and not necessarily an important one). DTX 173 at GOODMAN-CAR00000651-652 (identifying 30 different "major features" of the thermostat, only one of which is self-configuration). Indeed, Goodman's ComfortNet products include a host of other features, such as enhanced communication and diagnostics, LCD and touch screen displays, sound blankets, additional menus, the use of optional accessories including wireless remote monitoring, and the like. PTX 734 at ECT_0000091; PTX 926 at ECT_0000006; DTX 173 at GOODMAN-CAR00000651-652; PTX 699 at GOODMAN-CAR00126134. Many of these features were simplified through the use of four-wire communications.

ComfortNet thermostats, indoor units, and outdoor units can be mixed and matched with other Goodman products in a variety of ways. A customer can, of course, combine a ComfortNet indoor unit, outdoor unit, and thermostat in a communicating mode. But that is only one possibility — and the sole option that combines all three major elements (a thermostat, an indoor unit and an outdoor unit) of asserted claims 6, 8 and 13. Myriad other configurations are possible. For example, the ComfortNet indoor units and the ComfortNet outdoor units can operate in "legacy" mode without a communicating ComfortNet thermostat, *e.g.*, PTX 793 at

GOODMAN-CAR00000946, 952. In addition, a customer can combine a ComfortNet thermostat with a ComfortNet indoor unit *without* a ComfortNet outdoor unit. *E.g.*, PTX 946 at GOODMAN-CAR00000140. [REDACTED]

[REDACTED] D.I. 403 at 723:1-724:21; Ex. 4 (GOODMAN-CAR00313251). Goodman installs no ComfortNet systems on its own for any of its customers — it simply sells the components for installation and use as a customer chooses. D.I. 403 at 722:8-23.

Other combinations are also possible, including combinations with other manufacturers' products. D.I. 404 at 1001:6-1002:7. The ComfortNet thermostats and communicating control boards use an open communications protocol called ClimateTalk. D.I. 403 at 787:17-788:1. ClimateTalk is used by a number of different HVAC manufacturers, including Rheem. D.I. 403 at 787:3-16, 788:2-18. Honeywell also makes ClimateTalk-compatible communicating thermostats and communicating control boards. D.I. 403 at 805:8-806:19. ClimateTalk enables Goodman's equipment to work with equipment from other manufacturers that also supply self-configuring communicating HVAC systems. For example, a ComfortNet thermostat can operate a ClimateTalk-compatible Rheem indoor unit and a ClimateTalk compatible Rheem outdoor unit. Ex. 20 (DTX 371A-F); D.I. 403 at 863:5-12; 864:6-10; 865:13-866:21; D.I. 404 at 1001:6-1002:7. Accordingly, consumers can mix and match equipment. D.I. 403 at 798:1-5, 863:5-864:13, 865:15-866:21. However, Carrier made no allegations of infringement, and offered no proof of infringement, by any system that used a Rheem (or any other manufacturer's) unit in combination with Goodman's ComfortNet products.

B. The Product Market

Goodman introduced its ComfortNet products at a time when its competitors had either already released a communicating product or were planning to do so. PTX 8 at GOODMAN-

CAR00112174 (identifying Carrier, Trane, Lennox, York, and RUUD/Rheem as competitors who “aggressively offer” communicating systems). For example, Trane released its residential communicating system (ComfortLink II) in 2008, over a year before Goodman released its first communicating control in 2009. Ex. 15 (Trane Press Release). Lennox released the iComfort residential communicating system in February 2010, a few months after Goodman. Ex. 5 (CARR-GGI0167651) at 653; Ex. 9 (Lennox Feb. 2010 Bulletin). Rheem’s Comfort Control2 is a similar residential communicating system. Ex. 8 (Rheem Thermostat Brochure) at 3. York provided the Affinity Communicating Control at least by May of 2011. Ex. 11 (York Product Brochure). Carrier recognized each of these players as potential competitors to the Infinity system. PTX 513 at CARR-GGI0018934-938 (listing SWOT analyses for Trane, Lennox, Rheem, York, and non-traditional competitors Honeywell, Johnson Controls, and Invensys); PTX 2 at CARR-GGI0018650, 651, 659-660, 673-75; DTX 308 at CARR-GGI0091964, 973-974, 987-989; PTX 296 at CARR-GGI0017007; Ex. 3 (CARR-GGI0020139) at 143. And Carrier recognized that communicating controls had become commonplace by 2011. Ex. 10 (CARR-GGI0168099) at 117. That may have been precipitated in part by Emerson’s efforts to establish ClimateTalk as the industry standard protocol for communications between HVAC components, D.I. 403 at 703:2-3, 787:17-18, 788:2-14, or by the public acceptance of sophisticated electronic communication devices like smart phones. PTX 513 at CARR-GGI0018916 (identifying the upward trends in PCs and smart devices), 917 (identifying the upward trend in connectivity and need for remote monitoring), 918 (“26.1 million households[] are inclined to adopt technology that results in a connected home”).

Carrier’s motion is ambiguous about the definition of the market in which its Infinity products and Goodman’s ComfortNet products are sold — perhaps because Carrier seeks to

avoid discussing the numerous, significant players in the market. Regardless of how the market is defined — as HVAC systems generally or some subset thereof (*e.g.*, high-efficiency, premium, communicating, self-configuring HVAC systems, or something else) — numerous other companies have products competing with Carrier’s Infinity and Goodman’s ComfortNet products. *See, e.g.*, D.I. 401 at 239:6-9; PTX 296 at CARR-GGI0017007; Ex. 3 (CARR-GGI0020139) at 143. This includes HVAC manufacturers that introduced communicating systems such as Trane, Lennox, and Rheem at around the same time as Goodman. D.I. 402 at 403:10-404:3. Other HVAC manufacturers, such as Nordyne, also sell high-efficiency HVAC equipment in competition with Carrier’s Infinity equipment and Goodman’s ComfortNet units as well. D.I. 121 (Fisher Decl.) ¶ 5. And, if the market includes the communicating controls themselves, Honeywell and Emerson are additional participants, as they sell the thermostats and control boards incorporated into many HVAC manufacturers’ equipment to form a communicating “system.” D.I. 403 at 700:3-17; 713:14-714:45. For example, [REDACTED] Ex. 13 (Vogel Depo. Tr.) at 63:7-15, 96:11-16, 99:2-100:9.

While Carrier’s proposed market definition is not clear, the limited record shows that Goodman is a relatively small player compared to Carrier, Trane, Lennox, Rheem, and others. *See, e.g.*, Ex. 7 (CARR-GGI0186210) at 219. Taking what’s called the high-efficiency or premium market as an example, [REDACTED] D.I. 121 (Fisher Decl.) ¶ 6; Ex. 26 (Fisher Depo. Tr.) at 101:13-102:5.

⁴ 2010 is the last full year for which Carrier has provided sales data. PTX 624; D.I. 401 at 221:19-22.

[REDACTED] PTX 624; Ex. 4 (GOODMAN-CAR00313251) at 3. Additional record evidence suggests the overall market for high-efficiency systems is growing. Ex. 2 (CARR-GGI0020157) at 160 (listing one industry trend of higher energy efficiency). Apart from Goodman, Carrier has never sued any competitor for infringement of the '004 Patent or sought to exclude it from the market.

While Carrier never defines the relevant market or Goodman's participation in that market, it tries to tie a downturn in Infinity sales beginning in 2010 to Goodman's 2009 introduction of ComfortNet. Br. at 14, 24. Carrier's documents and witnesses tell a different story. David Meyers, Carrier's Vice President of Marketing and corporate representative, testified that Carrier's sales of Infinity System dipped in 2010 because of the recession. D.I. 401 at 221:14-16 ("As you can see, 2010, slight downturn. It's a tough year with the recession and what was happening in the economy. . ."); *see also id.* at 220:1-222:17. Carrier has not provided Infinity sales past 2011 (*see* PTX 624), and the 2011 sales figures shown on PTX 624 represent only a partial year. D.I. 401 at 221:19-22. Carrier documents also identify several other factors that likely contributed to the dip in sales during and after 2010. Ex. 24 (CARR-GGI0037695) at 699 (chart illustrating "Housing Starts Bottoming Out" in 2009-2011); *id.* at 701 (lost tax credit support);⁵ *id.* at 703 (identifying unemployment, challenging economy, and lingering recession as market forces affecting sales). Carrier also faced pricing pressure from other competitors' residential communicating HVAC systems, such as Lennox's iComfort and Trane's ComfortLink II. Ex. 5 (CARR-GGI0167651-652) [REDACTED]

⁵ On December 31, 2010, the \$1500 maximum tax credit which was in effect in 2009 and 2010 expired, leaving the previous \$500 maximum tax credit. Ex. 29 (Dept. of Energy Tax Credit Program Info).

The record on Carrier's motion is devoid of any evidence of how many complete Infinity systems (comprising all three components — a thermostat, an indoor unit, and an outdoor unit, which combination would be required by the asserted claims in order for those Infinity systems to be relevant) were sold by Carrier, so as to establish a base for assessing the impact of Goodman and other entrants on Infinity sales. Similarly missing is Carrier's market share for complete Infinity systems, and how that percentage changed, if at all, following the introduction of Goodman's ComfortNet products and the near simultaneous introduction of competitive products by other entrants.⁶ No specific lost sales to Goodman have been identified. No Carrier dealers lost to Goodman have been identified.

Carrier likewise does not provide significant information regarding Goodman's sales of ComfortNet communicating "systems." As noted above, Goodman's ComfortNet indoor and outdoor units can operate either in a non-communicating, legacy mode (with a traditional non-communicating thermostat)⁷ or in a "communicating" mode (with a ComfortNet thermostat). Carrier does not address the degree to which sales are for non-communicating mode. In fact,

[REDACTED]

[REDACTED]

⁶ Per the scheduling order in this case, which Carrier accepted, discovery directed to injunctive relief was bifurcated. D.I. 27 at ¶2(b) ("Discovery will be needed on the following subjects: . . . during the willfulness and damages phase of this case, issues concerning. . . other remedies, including the possibility of injunctive relief."). Based on that scheduling order, Carrier objected to giving Goodman any discovery by which Goodman asked Carrier for its basis for injunctive relief, claiming that injunctive relief "goes directly and exclusively to remedies issues, which Carrier understood to be bifurcated for purposes of both discovery and trial." *See* D.I. 203-5 (Carrier Response to Interrogatory No. 5). Thus, Carrier did not identify any evidence regarding current market share, lost sales, lost profits, or any other necessary information required to disprove irreparable harm for injunctive relief. If Carrier had intended to move for an injunction after the liability trial all along, it should have provided Goodman its basis for injunctive relief during discovery.

⁷ Since they do not "communicate," this configuration is non-infringing.

[REDACTED] Ex. 4 (GOODMAN-CAR00313251);
see also Ex. 26 (Fisher Depo. Tr.) at 111:8-112:7. From 2009 through the first quarter of 2014,

Goodman sold [REDACTED]

[REDACTED] Ex. 4 (GOODMAN-CAR00313251). [REDACTED]

[REDACTED] installed in a system in which a non-communicating outdoor unit was installed — or one in which no outdoor unit was installed at all. *See, e.g.*, PTX 946 at GOODMAN-CAR00000140. Such an installation would not have the three basic elements of the asserted claims — a communicating thermostat and communicating indoor and outdoor units. PTX 1, claims 6, 8, 13.

Despite having hired an expert economist, Dr. David Blackburn, Ph.D., for this case, Carrier never had Dr. Blackburn perform an analysis of the marketplace. Dr. Blackburn's analysis was limited to the alleged commercial success of the Infinity System. Dr. Blackburn performed no analysis of what impact, if any, sales of ComfortNet Systems (that included the communicating thermostat, indoor unit and outdoor unit required for infringement) had on sales or profitability of Infinity Systems. Goodman and Carrier both have established distribution channels, at least some of which are exclusive. D.I. 403 at 721:3-722:7; Ex. 18 (Meyers Depo Tr.) at 40:14-42:3; Ex. 22 (Bikman Depo. Tr.) at 10:5-12:8. Dr. Blackburn performed no analysis of the channels of trade or what impact the other players in the market had on the sales of Infinity systems. Nor did he provide any analysis of reputational effects, dealer retention, or anything else relevant to the putative impact on Carrier.

C. The '004 Patent Reexamination

All three of the asserted claims of the '004 Patent in this lawsuit (i.e., claims 6, 8 and 13)

have been rejected on multiple grounds in parallel reexamination proceedings at the United States Patent and Trademark Office (“PTO”). *See* D.I. 385-1 at 5, 8.

The Examiner initially rejected all of Carrier’s claims on December 11, 2012. D.I. 377-2. Carrier then filed a response and proposed 72 additional claims. D.I. 242-2, Ex. 10. The Examiner maintained his rejections of all of the claims, rejecting the 72 additional claims, and issued an Action Closing Prosecution on May 14, 2014. D.I. 271-17. Carrier again filed a response, and Goodman again filed its Third Party Requester Comments. The Examiner maintained his rejections of all of the pending claims for a third time, and issued a Right of Appeal Notice. *See* D.I. 385-1. Claims 6 and 13 have been rejected as being anticipated by Matsumoto (DTX 112), and claims 6, 8, and 13 have been rejected as being obvious, over both (a) Matsumoto in view of Bahel (DTX 95) and (b) Bahel in view of the HVAC Handbook (DTX 157). *See* D.I. 385-1 at 5, 8. Those rejections closely correspond with Goodman’s invalidity defenses in this case. D.I. 404 at 1050:1-1064:24, 1064:25-1076:15.

Earlier in this litigation, Carrier suggested that the reexamination would not conclude before any judgment in Carrier’s favor became final. D.I. 134 at 10-14. Carrier has endeavored to make that prediction reality by seeking to prolong the reexamination. In addition to submitting 72 new claims (all rejected), Carrier filed multiple petitions on increasingly futile grounds — requesting, for example, that Goodman’s comments be stricken, and that the Examiner’s May 14, 2014 Action Closing Prosecution be withdrawn as premature (both petitions were denied). Ex. 32 (’004 Patent Reexam, Sept. 6, 2013 Decision Denying Petition to Strike Requester Comments); Ex. 33 (’004 Patent Reexam, Aug. 20, 2014 Decision Denying Petition to Withdraw ACP). Carrier even argued, in three separate petitions (since expunged from the record), that the reexamination should be *terminated or suspended* because the Protective Order in this case

prevented Carrier from submitting Goodman's internal documents to the PTO.⁸

The Office of Patent Legal Administration rejected all of those petitions.⁹ It warned Carrier against filing any further such petitions:

Any further paper filed in the present reexamination proceeding containing pervasive or detailed allegations of misconduct, and/or allegations that the provisions of 37 CFR 11.18 have been violated will be expunged without consideration. Any later-filed petition to suspend prosecution of the present proceeding pending a determination by the Office on allegations of misconduct and/or allegations that the provisions of 37 CFR 11.18 have been violated will not be acknowledged or considered, and, if filed in the present reexamination proceeding, will be expunged without consideration.

D.I. 398-2 at 8 (emphasis in original). Carrier relies on its denied petitions to suggest that Goodman gamed the PTO into issuing its decision "based on an incomplete record." Br. at 5.

IV. ARGUMENT

A permanent injunction is an "extraordinary remedy" awarded only "in accordance with the principles of equity." 35 U.S.C. § 283; *eBay, Inc.*, 547 U.S. at 392. In *eBay*, the Supreme Court rejected the notion that injunctions should issue as a matter of course in patent cases. Instead, the patentee must satisfy four factors: (1) it will suffer irreparable injury; (2) monetary damages are inadequate to compensate for that injury; (3) the balance of hardships between the parties warrants equitable relief; and (4) the public interest would not be disserved by a permanent injunction. *Id.* at 391. Further, "[i]f a less drastic remedy . . . [is] sufficient to redress [a plaintiff's] injury, no recourse to the additional and extraordinary relief of an injunction [is] warranted." *Monsanto*, 561 U.S. at 142. Carrier has the burden of establishing that it is entitled to

⁸ Carrier could have submitted any documents itself under seal pursuant to MPEP 724.02 but did not.

⁹ See, e.g., D.I. 398-2 (Sept. 23, 2014 Letter Acknowledging That an Improper Paper in a Reexam Proceeding Has Been Returned/Destroyed); Ex. 30 ('004 Patent Reexam, Sept. 23, 2014 Decision Dismissing Petition to Require Submission of Documents); Ex. 31 ('004 Patent Reexam, Sept. 23, 2014 Decision Denying Petition to Suspend Reexamination).

such drastic relief. *eBay*, 547 U.S. at 391. And even where a patentee can satisfy all four factors, the “decision to grant or deny permanent injunctive relief” remains “an act of equitable discretion by the district court.” *Id.*

The grant or denial of a permanent injunction is case- and fact-specific. *Advanced Cardiovascular Sys., Inc. v. Medtronic Vascular, Inc.*, 579 F. Supp. 2d 554, 558 (D. Del. 2008) (Robinson, J.). Merely citing cases where district courts have entered permanent injunctions does not satisfy the patentee’s burden. In fact, courts — including this one — routinely deny requests for injunctive relief where the patentee fails to meet its burden with the requisite factual proof. *See, e.g., IGT v. Bally Gaming Int’l, Inc.*, 675 F. Supp. 2d 487, 492 (D. Del. 2009) (Robinson, J.). That is precisely the path the Court should follow here. Carrier has failed to make the requisite showing for injunctive relief. It has introduced no evidence supporting its claim of irreparable harm, including alleged harm to its reputation, which it alleges for the first time in its post-trial briefing. Nor has Carrier satisfied the other required elements.

A. Carrier Cannot Show It Has Suffered and Will Suffer Irreparable Harm

“[T]o satisfy the irreparable harm factor in a patent infringement suit, a patentee must establish both of the following requirements: 1) that absent an injunction, it will suffer irreparable harm, and 2) that a sufficiently strong causal nexus relates the alleged harm to the alleged infringement.” *Apple, Inc. v. Samsung Elecs. Co.*, 735 F.3d 1352, 1359-60 (Fed. Cir. 2013); *see also Riverbed Tech., Inc. v. Silver Peak Sys., Inc.*, C.A. No. 11-484-RGA, 2014 WL 4695765 at *11 (D. Del. Sept. 12, 2014). Carrier’s claims of lost sales and market share, price erosion, and harm to its reputation fall flat because Carrier provides no evidence to substantiate those assertions. It does not attempt to connect those allegations to demand for self-configuration. It does not establish that any harm is irreparable. And Carrier’s own decision to wait three years after Goodman released ComfortNet to bring suit and five years before ever

seeking an injunction belies its claim that it will be irreparably harmed.

I. Carrier Presents No Relevant Evidence of Lost Sales or Market Share to Goodman as a Result of the Allegedly Infringing Feature

a) Carrier Failed to Show Any Lost Sales or Market Share to Goodman

As an initial matter, Carrier has not shown that it lost any sales or market share to Goodman (much less lost sales resulting from infringement). Recognizing as much, Carrier invokes *Broadcom v. Emulex* for the notion that it can satisfy its burden simply by showing Goodman gained sales while Carrier lost them (Br. at 23). But *Broadcom* hardly stands for that sweeping, incorrect proposition. 732 F.3d 1325, 1336-38 (Fed. Cir. 2013). Rather, in *Broadcom*, the court stated, “[t]he record showed *conclusively* that Broadcom had lost market share *to Emulex*,” and the “evidence showed that Broadcom lost market share *as a result of Emulex’s competition*.” *Id.* at 1336-37 (emphases added). Thus, the *Broadcom* court affirmed the injunction in part because *specific evidence* linked Broadcom’s lost market share to Emulex’s competition — the sort of evidence Carrier fails to present here.

Here, Carrier neglects to identify any particular lost customers, sales, or business opportunities at all, much less any that were lost due to Goodman’s sales. Where more than two suppliers compete in a market, the patentee must demonstrate specific customers it has lost, or stands to lose, to the infringer directly as a result of the infringer’s continued sales. *LG Elecs. U.S.A., Inc. v. Whirlpool Corp.*, 798 F. Supp. 2d 541 (D. Del. 2011); *Adv. Cardiovascular*, 579 F. Supp. 2d at 560. Here, at least Trane, Rheem, York, Nordyne, and Lennox all sell high efficiency equipment, including communicating systems. Ex. 26 (Fisher Depo Tr.) at 189:25-191:3; PTX 296 at CARR-GGI0017007; D.I. 401 at 239:6-9; Ex. 3 (CARR-GGI0020139) at 143; D.I. 121 (Fisher Decl.) ¶ 5.

Carrier thus does not merely fail to identify any sales it lost; it also fails to present

evidence that it lost such sales to *Goodman*, as opposed to the other players in the market. Carrier is aware that each of these players competes in the same market, having conducted competitive analyses of each. PTX 296 at CARR-GGI0017007; D.I. 401 at 239:6-9. As this Court has recognized, a patent holder's internal competitive analysis is relevant in denying the existence of irreparable harm. *Belden Techs. Inc. v. Superior Essex Commc'ns LP*, 802 F. Supp. 2d 555, 577 & n.20 (D. Del. 2011) (Robinson, J.) (denying permanent injunction based in part on the plaintiff's internal analysis of multi-competitor market because "defendants' infringement has not necessarily affected plaintiffs' market position"). [REDACTED]

[REDACTED] — and that market is crowded with other competitors — there is ample reason to think any alleged lost sale (which itself has never been proved) would be a loss to a different competitor that an injunction against Goodman cannot redress. In any event, it is Carrier's burden to offer evidence that it has lost, or faces the "imminent" threat it will lose, sales to Goodman. *Natural Footwear Ltd. v. Hart, Schaffner & Marx*, 760 F.2d 1383, 1404 (3d Cir. 1985). It has not carried that burden. Despite Carrier's determined efforts to ignore the other players in the industry, "[t]his is not a clear case of a two-supplier (two-product) market wherein a sale to defendants represents, necessarily, the loss of a sale to plaintiff." *IGT*, 675 F. Supp. 2d at 490.¹⁰

Even assuming that Carrier's sales declined, that could be the product of any number of factors, such as "declining demand in the overall market, changes in the regulatory framework

¹⁰ As its sole evidence of a specific lost sale, Carrier points to [REDACTED] (whatever that means). Br. at 14 (citing PTX 289). But no evidence in the record establishes that that sale was consummated, or that Carrier could have made that sale. *Cf. Belden*, 802 F. Supp. 2d at 577-578 ("Absent specific information and, combined with the fact that the parties are not the only competitors in the market, these alleged losses [of thirty-nine quotes] do not persuade the court. On the present record, irreparable harm has not been established." (footnote omitted)).

affecting sales of the practicing and competing products,” and the like (Ex. 1 (Kaplan Decl.) at ¶ 23), as opposed to alleged infringement by Goodman. Indeed, demand for residential HVAC systems may have dropped with the “Great Recession” that coincided with Goodman’s entry into the market. Carrier’s own corporate witness identified that recession as the cause for Carrier’s “slight downturn” in sales in 2010. D.I. 401 at 221:14-16 (“As you can see, 2010, slight downturn. It’s a tough year with the recession and what was happening in the economy. . .”); *see also id.* at 220:1-222:17; Ex. 24 (CARR-GGI0037695) at 703-704 (“Economy remains challenging; Unemployment remains high; Lingering recession; . . . ALL industries affected”). Carrier again did not address the market conditions in 2010 or later years.

Carrier’s documents identify other factors that may have caused the alleged dip in sales in 2010, none of which include the introduction of Goodman’s ComfortNet system. Ex. 24 (CARR-GGI0037695) at 699 (chart illustrating “Housing Starts Bottoming Out” in 2009-2011); *id.* at 703 (identifying unemployment, challenging economy, and lingering recession as market forces affecting sales). Carrier’s prices for the Infinity control also may have impacted its sales because Carrier priced its Infinity units higher than competing systems. *See, e.g.*, Ex. 5 [REDACTED]

[REDACTED] Even Carrier itself recognized other competitors’ marketing presence, branding, and innovation, additional factors that may have impacted any decline in Carrier’s sales. Ex. 7 (CARR-GGI0186210) at 214 (Trane is “perceived by dealers as the leader in product innovation and quality” and “does a better job at using tools, product innovation, promotions, business portfolio integration”); Ex. 10 (CARR-GGI0168099) at 133 (“Trane’s and Lennox’s Modulating furnace are both out on the market with more FFB’s [flat flame burners] than our new modulating furnace that is not even out yet”; “Trane has a communicating tstat out now that has

all of the features of our infinity [control] that is still in testing.”; “Furnace line is way overdue for improvements”).¹¹

Indeed, Carrier provides no analysis to correct for any of the other myriad reasons why demand may have declined. As Dr. Kaplan explains, there are economically sound ways to determine the reason for lost sales, including regression analysis of Carrier’s sales as a function of various factors including relevant supply and demand factors and demand side variables, such as product prices, electricity prices, economic activity variables, tax policies, prices of substitutes, and other factors. Ex. 1 (Kaplan Decl.) at ¶¶ 23-24. Carrier has chosen not to employ them. That choice is telling. Carrier simply assumes that any lost sales must be due to Goodman’s alleged infringement and not any of the numerous other factors discussed above. Carrier’s supposition is insufficient to support an injunction. “It is most problematic that plaintiff points to no documentary (or other) evidence regarding the effects of defendants’ infringement (on plaintiff).” *IGT*, 675 F. Supp. 2d at 492.¹²

Carrier invokes Goodman’s statements that it considers itself to be Carrier’s biggest competitor. Br. at 24. Carrier’s reliance on such “evidence” is unavailing as Goodman and Carrier compete on a broad range of HVAC products other than the markets in which the Infinity system and the ComfortNet line of products are sold. It is only the latter which is relevant here,

¹¹ The record indicates that other factors may have affected any decline in sales that Carrier experienced. For example, as of 2011, Carrier recognized it needed to update its Infinity thermostat control because it lacked many of the features of existing thermostats on the market, including a touch screen — which many competitors’ products featured. PTX 296 at CARR-GGI0017007; D.I. 401 at 239:6-9; Ex. 3 (CARR-GGI20139) at 143; Ex. 10 (CARR-GGI0168099) at 133 (“We need the new infinity control ASAP!”). Carrier leaves these unaddressed as well.

¹² See also *Praxair, Inc. v. ATMI, Inc.*, 479 F. Supp. 2d 440, 444 (D. Del. 2007) (Robinson, J.) (denying injunction in part because patentee “has not provided or described any specific sales or market data to assist the court, nor has it identified precisely what market share, revenues, and customers [it] has lost to [the infringer].”)

not whether Goodman might consider itself Carrier's biggest competitor in another part or all of the HVAC market. Yet Carrier has not established the segment of the market to which Goodman's general statement applies.¹³ Carrier's argument that Goodman may have wanted to reach more dealers using ComfortNet (Br. at 25) does not support the notion that Carrier lost any sales to Goodman. This only shows Goodman competed with Carrier in the market — which does not in and of itself show irreparable harm. Carrier asked at least one Goodman witness about dealer recruitment via ComfortNet. He explained repeatedly, [REDACTED]

[REDACTED] Ex. 19 (Alexander Depo. Tr.) at 146:10-12, 147:8-11, *see also id.* at 139:18-147:14.

In the absence of specific lost sales, Carrier relies on its total sales of Infinity-capable units. (Br. at 14, 24). But sales of Infinity-capable products form a relatively small part of Carrier's HVAC business, so Carrier will not be wiped out of the market if Goodman is allowed to compete. *Contrast i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 861 (Fed. Cir. 2010) (Microsoft's infringement rendered i4i's product obsolete, causing it to change its business strategy to survive). Taking 2010 as an example, Carrier's Infinity sales were nearly \$300 million. PTX 624. In contrast, Carrier told its shareholders that its net sales in 2010 were over \$11.3 billion. Ex. 14 (United Technologies 2010 Annual Report) at 54. Thus, Carrier's sales of its Infinity-capable units are comparably insignificant. *Cf. Belden*, 802 F. Supp. 2d at 576 (finding \$111 million to be insignificant in relation to total revenue of \$1.4 billion).

¹³ Carrier references Goodman testimony about Goodman competing with Carrier by providing "cold cheap air." Br. at 6-7. But that is irrelevant to the Court's injunction analysis. Cheaper, lower efficiency units are not the part of the "premium" market Carrier appears to be claiming is at issue here. *Id.* at 7 ("Carrier invested in developing its patented self-configuring Infinity System to reinforce Carrier's reputation for innovation and to help sell premium systems.").

Carrier's reliance on the "total" sales of Infinity products is also improper because the Infinity indoor and outdoor units can be connected to a non-Infinity thermostat and thereby used without the patented self-configuration functionality, as Carrier readily admits. Ex. 25 (Shah Depo. Tr.) at 290:8-16. The number of Infinity-capable units sold thus says little about how many Infinity systems comprising a communicating thermostat, indoor unit and outdoor unit ("Complete Infinity Systems") Carrier sold.¹⁴ Without such information, it is impossible to know what portion of Carrier's total sales Complete Infinity Systems represent, rendering Carrier's claims of declining sales meaningless.¹⁵

Carrier's argument that it lost market share to Goodman suffers from the same evidentiary failure as its claim of lost sales. Carrier has not even defined the relevant market or identified its competitors, both of which are necessary to prove an economic harm to Carrier in that market. Ex. 1 (Kaplan Decl.) at ¶ 21. Carrier likely chose not to do so because, however that market is defined, Trane, Rheem, York, Nordyne, and Lennox all sell products that compete with Carrier's Infinity. Ex. 26 (Fisher Depo Tr.) at 189:25-191:3; PTX 296 at CARR-GGI0017007; D.I. 401 at 239:6-9; Ex. 3 (CARR-GGI0020139) at 143; D.I. 121 (Fisher Decl.) ¶ 5. Any mention of those competitors is glaringly absent from Carrier's brief.

Instead of analyzing the market, Carrier relies almost exclusively on the argument that "[u]ntil Goodman came on the market, Carrier accounted for 100% of communicating controllers

¹⁴ Goodman does not concede that a Complete Infinity System actually comes within the scope of the '004 Patent. It is only such systems, however, that are even relevant for purposes of analyzing the market since any system not containing these three components clearly cannot come within the scope of the '004 Patent.

¹⁵ Mr. Meyers testified that Infinity-capable products represented about 10% of Carrier's overall sales volume in 2004 and approximately 18% in 2007. D.I. 401 at 224:12-16. However, no evidence shows the breakdown of those sales, that is, how many consisted of complete systems rather than partial systems and/or sales of components in legacy mode. Carrier's brief does not even acknowledge the difference let alone explain it.

in the market.” Br. at 13. Carrier thus concludes that Goodman must have taken market share.

Ex. 26 (Fisher Depo Tr.) at 98:17-99:15; *see also* Ex. 22 (Bikman Depo. Tr.) at 89:18-90:5.¹⁶ Moreover, Trane released its communicating system *before* Goodman — so Carrier could not have held 100% of the market before ComfortNet’s release. Ex. 26 (Fisher Depo. Tr.) at 189:25-190:10.

Compounding the incompleteness of Carrier's evidence, Carrier largely ignores the market as it exists today, which is most relevant given that an injunction is by definition

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prospective relief. *See Adv. Cardiovascular*, 579 F. Supp. 2d at 559 & n. 9 (“there is no indication that [the infringer] is *currently* drawing bare-metal stent sales away from [the patentee], as compared to [another player in the market]” and “[the patentee’s] focus on *prior* market data, specifically, its market share losses in the late 1990s upon [the infringer’s] launch of its infringing stents, is misplaced.”) (emphases added). Carrier’s reliance on PTX 624 (Br. at 14) suffers from the same defect — that spreadsheet ends in 2011 and represents only a partial year of 2011 sales. PTX 624; D.I. 401 at 221:19-22. That hardly demonstrates the need for a permanent injunction from 2014 onward. That is especially true given that, [REDACTED]

[REDACTED] Ex. 26 (Fisher Depo. Tr.) at 185:10-187:8.

The record shows that [REDACTED] compared to the other competitors. D.I. 121 (Fisher Decl.) ¶ 6. Carrier has not addressed the possibility that, if Goodman is drawing market share at all, it could be from any of Trane, Rheem, Lennox, Nordyne, York, or others — and not Carrier. *See Adv. Cardiovascular*, 579 F. Supp. 2d at 559-60 (denying a permanent injunction where the infringer held the smallest market percentage and absent any indication that it drew sales from the patentee rather than the other market participant). Goodman ComfortNet products also replaced older models in Goodman’s product lines (*e.g.*, air conditioners: A/DSX for A/DSXC, heat pumps: A/DSZ for A/SZC, furnaces: A/GMV for A/GMVC; air handlers: AEPF for AVPTC). Ex. 4 (GOODMAN-CAR00313251). Thus, Goodman may be selling its ComfortNet line of products as replacements for its own previously sold products thereby taking no market share from anyone. Or, the total market size may be increasing, in which case Goodman may not be drawing market share from any

competitor, including Carrier.¹⁷

b) Carrier Failed to Connect its Alleged Lost Sales or Market Share to the Allegedly Infringing Self-Configuration Feature

The Federal Circuit has made clear that, even if a patentee loses sales to an infringing competitor, it must show a causal nexus between the lost sales and infringement — i.e., “that the infringing feature drives consumer demand for the accused product.” *Apple*, 735 F.3d at 1364; *see also Riverbed*, 2014 WL 4695765 at *11. This inquiry “informs whether the patentee’s allegations of irreparable harm are pertinent to the injunctive relief analysis, or whether the patentee seeks to leverage its patent for competitive gain beyond that which the inventive contribution and value of the patent warrant.” *Apple*, 735 F.3d at 1363 (internal quotation marks omitted).

Carrier makes no effort to show a causal nexus between putative lost sales and demand for the self-configuration feature in Goodman’s products. Standard economic methods such as regression analysis and consumer surveys are available to determine if particular features are driving sales of a product, *see* Ex. 1 (Kaplan Decl.) at ¶¶ 30-34, and Carrier performed no such analysis. That is fatal to its demand for injunctive relief. At least one court in this district recently denied a permanent injunction, despite finding that all other *eBay* factors weighed in favor of an injunction, because the patentee failed to show causal nexus between the irreparable harm and the alleged infringement. *Riverbed*, 2014 WL 4695765, at *11.¹⁸ The closest the patentee came

¹⁷ Carrier appears to confuse increases in sales with increases in market share. *See* Br. at 24

_____”) The two are not the same. Further, Goodman had been selling high-efficiency or premium *units* (without the communicating feature) since before 2009. Ex. 26 (Fisher Depo. Tr.) at 25:19-21, 96:23-97:10; Ex. 22 (Bikman Depo. Tr.) at 53:5-10.

¹⁸ Indeed, in *Riverbed*, the patentee even tracked the number of head-to-head competitions it had with each competitor in the marketplace, and the evidence showed the accused infringer

to connecting consumer demand with the patented features was offering documents from the infringer claiming its products have all the functionality of the patentee's. *Id.* at *12. But the court reasoned "Federal Circuit law is clear. . . that evidence of copying or mimicking is not sufficient to establish the required nexus. All of these advertisements may be promoting infringing features copied or derived from [the patentee], but they do nothing to prove that customer demand is driven by the patented functionality [as opposed to other factors]". *Id.* The court denied an injunction, holding it "cannot grant such a 'drastic and extraordinary remedy' . . . on presumptions alone," and that "Federal Circuit case law requires a more concrete link between the infringing feature and consumer demand." *Id.* at *13.

The same failure of proof forecloses injunctive relief here. Carrier relies on Goodman documents that indicate ComfortNet was designed to compete with Infinity to support its argument of lost sales and market share. Br. at 11, 24-25. But those documents do not indicate that customer demand is driven by the self-configuration feature— at best, they are the type of mimicking that the Federal Circuit and this district have held is insufficient to show causal nexus. *See* PTX 8; PTX 37; PTX 38. Moreover, to the extent there is record evidence, it shows that Goodman's products have sold for a number of reasons unrelated to the patented feature, like their high efficiency and tax credits. Ex. 19 (Alexander Depo. Tr.) at 139:18-24, 141:3-8 [REDACTED]."); Ex. 22 (Bikman Depo. Tr.) at 72:8-78:13, 89:10-90:5 ("[REDACTED] [REDACTED]"); Ex. 26 (Fisher Depo. Tr.) at 98:21-99:15, 171:16-20, 176:6-20 ([REDACTED] 178:16-181:8, 182:15-23; D.I. 402 at 497:4-7 ([REDACTED]

held a 61% win rate over the patentee in a particular set of competitions. *Id.* But the lack of causal nexus evidence defeated that proof. *Id.* at *11-13.

[REDACTED]). Indeed, many of ComfortNet's attractive features are the result of four-wire serial communications — but that is not covered by the '004 Patent. *See* p.5 *supra*.

Goodman's sales figures indicate that [REDACTED]

[REDACTED]. Ex. 4 (GOODMAN-CAR00313251).¹⁹ Goodman for example sells its ComfortNet line of products as replacement products, which could be hooked up in non-communicating mode. D.I. 403 at 723:16-724:11. [REDACTED]

[REDACTED] *See id.*; Ex. 26 (Fisher Depo. Tr.) at 111:8-112:7. Carrier has not performed any expert analysis of these factors, nor has it provided any survey evidence. It leaves them wholly unaddressed. Perhaps this is because “[n]o damages discovery has taken place, which makes it difficult to establish lost sales, lost market share, and a strong nexus between the patented features and customer demand.” (*Riverbed*, 2014 WL 4695765, at *14) (denying injunction). But in any case, the record Carrier sets forth is an insufficient basis on which to grant an injunction.

2. *Carrier's Decision to Wait Nearly Five Years Before Seeking an Injunction Belies Its Claims of Irreparable Harm*

Carrier's actions for nearly half a decade speak more loudly than the assertions in its brief. Goodman has been selling its ComfortNet products for approximately five years, since late 2009. PTX 35; Ex. 26 (Fisher Depo Tr.) at 12, 78; Ex. 23 (Clark Depo. Tr.) at 19, 197. But Carrier did not file suit against Carrier until July 2012, and did not seek injunctive relief until

¹⁹ *See also Apple*, 735 F.3d at 1360-61 (“[I]t may very well be that the accused product would sell almost as well without incorporating the patented feature [and thus] even if the competitive injury that results from selling the accused device is substantial, the harm that flows from the alleged infringement (the only harm that should count) is not.”) (alteration in original and internal quotation marks omitted).

October 2014. If Goodman had really been inflicting irreparable harm on Carrier, “taking sales, market share, and business opportunities away” all that time (Br. at 23-26), one would have expected Carrier to have acted quickly. But Carrier sat idly by for three years after Goodman launched ComfortNet before filing suit (and provided no notice to Goodman of alleged infringement in the interim). Ex. 21 (CARR-GGI0162400) (attaching brochure of ComfortNet Launch). If Goodman’s ComfortNet products were truly causing Carrier irreparable harm — such as by fostering an “industry belie[f] [that] Carrier d[oes] not enforce its intellectual property rights” (Br. at 21) — Carrier would have, and should have, done something sooner. *See LG*, 798 F. Supp. 2d at 563 (denying permanent injunction, reasoning that the patentee “would not benefit substantially from an injunction being issued at this stage, several years after [the infringer’s] accused product entered the market.”).

Even after Carrier sued Goodman in July 2012, Carrier did nothing to stop the putative irreparable harm it now asserts. Carrier did not move for a preliminary injunction. That too indicates that it has not suffered irreparable harm. *See Tyco Healthcare Grp. LP v. Ethicon Endo-Surgery, Inc.*, 936 F. Supp. 2d 30, 86 (D. Conn. 2013) (denying permanent injunction because “[the witness who] spoke of ‘irreparable harm’ suffered by [Plaintiff] in terms of the damages to its reputation . . . was unable to articulate why if [Plaintiff] has endured infringement and harm to its reputation since 2004, it never sought preliminary injunctive relief.”); *MercExchange, L.L.C. v. eBay, Inc.*, 500 F. Supp. 2d 556, 573 (E.D. Va. 2007) (considering failure to seek a preliminary injunction as one factor indicating a lack of irreparable harm and that money damages were adequate). And, Trane, Rheem, Honeywell, and Lennox all sell communicating and self-configuring HVAC products (*see* PTX 296 at CARR-GGI0017007; D.I. 401 at 239:6-9; Ex. 3 (CARR-GGI0020139) at 143), but Carrier has taken no steps to exclude them from the

market. In short, Carrier's failure to act to prevent the supposed irreparable harm for nearly half a decade itself cuts strongly against its claim of irreparable harm.

Finally, if the self-configuration feature were so critical to Carrier's market position, Carrier presumably would have taken steps to notify the public of its patent by marking the Infinity system and associated literature. But it waited almost five years after the '004 Patent issued (in July 2007) before marking its literature with the '004 Patent (in May 2012),²⁰ even though it had been selling Infinity since 2004. *Compare* PTX 530 with DTX 454, DTX 455, DTX 456. In front of the jury, Carrier claimed that the Infinity product line was "significant," and that Carrier has a long history of innovation and values patents. D.I. 401 at 225:6-10; 132:11-13; 144:11-15; 189:22-190:2; D.I. 402 at 298:24-299:4. But in the market, Carrier let the '004 Patent collect dust in its files.

3. *Carrier Fails to Establish Irreparable Harm Through Price Erosion*

Carrier's argument that ComfortNet has resulted in downward pressure on Carrier's price (Br. at 26) suffers from the same evidentiary infirmities. Carrier points to a table, prepared by its attorneys, comparing prices for Infinity (and its companion Evolution) indoor and outdoor units to Goodman's ComfortNet (and its companion Amana) indoor and outdoor units. D.I. 396, Ex. 10. The table proves nothing.²¹ First, the fact that Goodman's prices may be lower than Carrier's does not demonstrate price erosion, as Carrier never shows where it *dropped* its prices as a result of Goodman's entry into the market. Secondly, the chart merely shows prices for indoor and outdoor units, which do not by themselves come within the scope of the '004 Patent. PTX 1 at 5:15-34. Those units have non-infringing uses. *See supra* at 10. Third, and perhaps most

²⁰ Carrier produced one 2010 document that identified the '004 Patent, but that document was not one that Carrier distributed to the general public. *See supra* note 2.

²¹ This table is suspect on its face. It compares Carrier's 2012 prices (D.I. 396, Ex. 11) to Goodman's 2011 prices (D.I. 396, Ex. 12), even though [REDACTED]. *See* Ex. 4 (GOODMAN-CAR00313251).

compelling, five of the entries show Goodman units that are *more expensive* than the corresponding Carrier unit.²² Price erosion indeed.

To the extent that Carrier has suffered declining prices, Carrier has not presented evidence tying the decline to Goodman's ComfortNet Systems. As noted above, at least three other players sell self-configuring HVAC products. Ex. 26 (Fisher Depo. Tr.) at 189:25-191:3; PTX 296 at CARR-GGI0017007; D.I. 401 at 239:6-9; Ex. 3 (CARR-GGI0020139) at 143. Carrier has not shown that Goodman — as opposed to any one of these other companies — is responsible for any price responses Carrier has undertaken. *See Belden*, 802 F. Supp. 2d at 576. In fact, Carrier's documents showed that its Infinity controls were being pressured in the market by price and product features from Lennox and Trane, *not* Goodman. *See supra* Section IV.A.1.a. Nor has Carrier attempted to show that any price decreases resulted from Goodman as opposed to the pressures of a poor economy. *See* Section IV.A.3, *supra*. As in *Belden*, the "argument of price erosion due to the presence of defendants' infringing products is also unpersuasive as the industry experienced an overall decrease in market price due to economic conditions and the high amount of competition." 802 F. Supp. 2d at 577. Finally, Carrier may have dropped its prices (if at all) for the products at issue in this case because it released newer, better, and more expensive products. The record is devoid of evidence regarding how Carrier sets its pricing and what factors affect its pricing decisions — including regional factors, weather, seasonality, competition, economic factors, and the like.

Even if Carrier has dropped its prices because of Goodman, Carrier again has failed to establish any causal nexus between those price drops and consumer demand for the allegedly infringing feature. *Apple*, 735 F.3d at 1364; *see also Riverbed*, 2014 WL 4695765, at *11. Any

²² For example, according to the chart, the Amana 16 SEER 5 ton heat pump is more expensive than its Infinity counterpart, [REDACTED] D.I. 396, Ex. 10.

decline in Carrier's prices attributed to competition with ComfortNet could have been due to ComfortNet's other features, including four-wire communication, ease of diagnostics, touch screens, and high efficiency units — and Goodman's marketing of those features. *Apple, Inc. v. Samsung Elecs. Co.*, No. 11-CV-01846-LHK, 2014 WL 976898, at *19 (N.D. Cal. Mar. 6, 2014) (finding patentee failed to show that the patented features — as opposed to other features in the accused products — accounted for consumer demand). Carrier was required to link its alleged price erosion harm to Goodman's alleged infringement. Because it failed to do so, it has not shown irreparable harm.

4. *Carrier Cannot Show Reputational Harm*

Carrier also complains (at Br. 19-23) that Goodman irreparably harmed its reputation as the industry's leading innovator — a complaint similarly devoid of support. Carrier has not set forth any evidence, such as surveys or other proof from third parties, showing that Carrier's reputation among the buying public has been diminished. Ex. 1 (Kaplan Decl.) at ¶ 25. Even though it had five years to look, Carrier cannot point to a single dealer or customer that thought less of Carrier's as a consequence of Goodman's presence in the market. *See Hynix Semiconductor, Inc. v. Rambus, Inc.*, 609 F. Supp. 2d 951, 983-84 (N.D. Cal. 2009) (rejecting claim of damage to image as an innovator because patentee did "not introduce any evidence from industry participants (other than [itself]) showing that [the] infringement has caused them to think less of [the patentee].") That alone is fatal to Carrier's contention.

And the record evidence shows the contrary: While Carrier is not *always* first to market (it was late to the market with touchscreens), Carrier has maintained a strong brand. Carrier's own corporate witness testified at trial that Carrier has maintained its position as both a market leader and innovator, and Goodman's economic expert agreed that Carrier has a strong brand. D.I. 401 at 190:21-191:5; D.I. 405 at 1260:16-1261:21; 1285:19-1286:1. Further, Carrier

received industry awards for its Infinity products as late as 2012 — three years after Goodman entered the market. Ex. 28 (Declaration of David Meyers in '004 Reexam at 2 & Ex. Q). And, any statements by Goodman that ComfortNet might enhance Goodman's *own* brand image (Br. at 23) does not support the notion that *Carrier's* brand image would be damaged.

Douglas Dynamics, LLC v. Buyers Products. Co., relied on by Carrier (Br. at 19-23), is distinguishable. In *Douglas*, the court analogized the parties to Mercedes and Ford, where the defendant's brand was "considered less prestigious and innovative." 717 F.3d 1336, 1345 (Fed. Cir. 2013). In the present case, Goodman partnered with the industry's leading experts in controls, Emerson and Honeywell, in developing and releasing its ComfortNet product. Even if Goodman's brand is considered less innovative than Carrier's (a point for which Carrier presents no evidence), Emerson and Honeywell have strong brands and reputations in the controls industry. Carrier's Vice President of Marketing and corporate representative moreover admitted that Carrier was not regarded as a "serious thermostat player" compared to Emerson and Honeywell before releasing Infinity. Ex. 18 (Meyers Depo. Tr.) at 133:7-16.

Finally, Carrier makes the unsupported statement that the lure of becoming a Carrier dealer would be diminished if the industry believed that Carrier did not enforce its intellectual property rights. Br. at 21. Again, Carrier provides no evidence of any lost Carrier dealers or a slowing in recruitment of dealers due to Goodman's alleged infringement. Carrier's failure to vigorously assert its intellectual property rights here by (1) seeking to protect its rights from the outset; (2) asking for a preliminary injunction; or (3) moving against other competitors with self-configuring systems further belies its argument.

Carrier's reputational-harm argument (and its reliance on *Douglas Dynamics*), also falters on the causal nexus requirement. *Apple*, 735 F.3d 1352; *see also Riverbed*, 2014 WL 4695765, at

*11. *Douglas Dynamics* does not address the causal nexus requirement at all. And in *Douglas*, the two parties competed in selling snowplow assemblies, and patented invention *was the snowplow assembly* itself. 717 F.3d at 1339-40. Here, by contrast, the self-configuration feature is one (optional) feature of complex, multi-featured HVAC systems. Goodman's products may sell because of any number of features. Carrier's brief falls short in making the connection between the alleged harm to its reputation and the self-configuration feature.²³

* * * * *

Irreparable harm is “‘the sine qua non of injunctive relief.’” *Northeastern Fla. Chapter of the Ass’n of Gen. Contractors v. City of Jacksonville*, 896 F.2d 1283, 1285 (11th Cir. 1990) (quoting *Frejlich v. Butler*, 573 F.2d 1026, 1027 (8th Cir. 1978)). Carriers’ failure to establish irreparable harm thus by itself forecloses its request for injunctive relief.

B. Carrier Failed to Show that Money Damages Are Inadequate

During discovery, Carrier refused to answer interrogatories regarding the adequacy of monetary damages. *See* D.I. 203-5 (Carrier’s Response to Interrogatory No. 5). Carrier thus has chosen to proceed not only with precious little evidence that this factor favors relief, but also without having given Goodman discovery on the issue. There is no evidence of how many ComfortNet systems comprising the three required components of a thermostat, indoor unit and outdoor unit have been sold since ComfortNet’s introduction. There is no evidence of how many Infinity Systems comprising those same three components have been sold during that same time frame. Nor is there any evidence concerning the sales of communicating HVAC systems by Trane, Rheem, York, or Lennox. *See* PTX 8 at GOODMAN-CAR00112174. Given the record

²³ Indeed, earlier in this litigation, Carrier accused the same Goodman products of infringing another of its patents (U.S. Pat. No. 7,775,452) directed to serial communication over four wires. Carrier has not even established that Goodman harmed its reputation by selling products incorporating the features of the ’004 Patent (self-configuration) as opposed to those of the ’452 Patent (reduced wiring and serial communications).

presented by Carrier, it is premature to grant an injunction. *See S.O.I.TEC Silicon On Insulator Techs. SA v. MEMC Elec. Materials, Inc.*, Civ. No. 08-292-SLR, 2011 WL 2748725, at *22 (D. Del. July 13, 2011) (Robinson, J.) (denying permanent injunction where damages discovery and trial were bifurcated, reasoning it was “unclear at this juncture what damages discovery will reveal . . . [so] the appropriateness of a permanent injunction cannot be weighed on this record”).

Carrier has also refused to provide discovery on any licensing of the '004 Patent. Ex. 27 (Response to RFA 21); D.I. 190 (Stipulation).²⁴ Willingness to license generally renders permanent injunctive relief inappropriate. *See Advanced Cardiovascular*, 579 F. Supp. 2d at 560 (“Money damages are rarely inadequate in these circumstances; rather, permanent injunctions are typically granted in two-competitor situations where the patentee has demonstrated an unwillingness to part with the exclusive right.” (footnote omitted)). Finally, Carrier has made no attempt to gain market exclusivity, given its failure to proceed against other competitors and its failure to mark its product and its associated publicly available literature until five years after the '004 Patent issued.

Even if Carrier could show it will lose sales to Goodman (and it has not), such lost sales can be compensated through damages. *See, e.g., Shatterproof Glass Corp. v. Libbey-Owens Ford Co.*, 758 F.2d 613, 616 (Fed. Cir. 1985). Carrier argues (without evidence) that it is not possible to quantify the precise damage that will result each time Goodman launches a new feature. But Carrier nowhere explains how the launch of *new* features (for which there is no infringement finding) has any relevance to injunctive relief. Just as damages should be adequate to compensate Carrier for any past infringement ultimately found, damages should be adequate to

²⁴ In this stipulation, Carrier agreed not to introduce evidence “that there is any license or attempt to license [the '004 Patent],” reserving its right and Goodman’s right to raise the issue of licensing during the willfulness and damages phase. D.I. 190 at ¶¶ 1-2.

compensate Carrier for any future infringement. Because Carrier's contrary argument rests on unsupported speculation about future events, it cannot justify injunctive relief.

The Daikin ads and the introduction of the CTK04 thermostat cited by Carrier (Br. at 27) do not alter the calculus. The possible expansion of ComfortNet sales does not mean money damages are inadequate or insufficient to make Carrier whole. Courts regularly order on-going royalties to compensate the patentee for such future "infringement." *See, e.g., Shatterproof Glass Corp. v. Libbey-Owens Ford Co.*, 758 F.2d 613, 616 (Fed. Cir. 1985) (denying an injunction and upholding a 5 percent ongoing royalty); *z4 Techs. Inc. v. Microsoft Corp.*, 434 F. Supp. 2d 437, 442 (E.D. Tex. 2006) (denying permanent injunction and ordering patentee to file a complaint and the defendant to answer the complaint with quarterly reports of the number of infringing units sold that would permit a royalty calculation for future sales "based on the same reasonable royalty calculation used by the jury at trial."). Carrier fails to address why such a remedy would be inadequate.²⁵

C. The Balance of the Hardships Firmly Tips in Goodman's Favor

1. The PTO's Invalidation of the '004 Patent Counsels Against an Injunction

Finally, the PTO has rejected all asserted claims of the '004 Patent on multiple grounds in reexamination. D.I. 385. That decision is now on appeal. D.I. 398, Ex. 1. If an injunction is entered, Goodman would be faced with the burden of halting its operations concerning an entire product line (ComfortNet) — including dozens of furnaces, air conditioners, air handlers, heat pumps, and thermostats that have been in the marketplace for five years — based on a patent that

²⁵ Given Goodman's revenue, Goodman's ability to pay an ongoing royalty is not in question. D.I. 396 Ex. 8; *see ActiveVideo Networks, Inc., v. Verizon Commc'ns, Inc.*, 694 F.3d 1312, 1340 (Fed. Cir. 2012). An ongoing royalty, if anything, therefore, would be a more appropriate remedy in this case.

is likely invalid.²⁶ In a case where a patent had similarly been rejected during reexamination (and that decision was subject to appeal), this Court concluded “the harm to defendants if the injunction were to issue on invalid patents is much greater than the harm to plaintiffs should the injunction not issue at all.” *Belden*, 802 F. Supp. 2d at 578-79. Although Carrier previously argued that the PTO appeal would not reach the Federal Circuit before a final decision in this case, Carrier has now abandoned that argument. Br. at 3. (“The timing may be too close to call.”). At the very least, any injunction should be stayed pending the result of the reexamination. *Standard Havens Prods., Inc. v. Gencor Indus., Inc.*, No. 93-1208, 1993 WL 172432, at *1 (Fed. Cir. May 21, 1993) (reversing district court decision as legal error “with instructions to stay the imposition of the permanent injunction and to stay any further proceedings respecting damages until the reexamination decision becomes final”).

2. *Carrier’s Overbroad Injunction Will Impose Enormous Hardship on Goodman*

Carrier does not seek to enjoin a product line that was just introduced; it seeks to enjoin one that has been in the marketplace for 5 years. It takes no account of the enormous burden that would be imposed by forcing Goodman to abandon a line that has been around so long.

Moreover, while the asserted claims are narrow, Carrier seeks an extraordinarily broad injunction. The asserted claims are limited to a set of communications in a system that must include an indoor unit, an outdoor unit, and a thermostat as well as a limited set of functions performed by the thermostats (storing, determining and selecting optimal control strategies). Goodman’s devices have a wide range of functions and applications beyond what the asserted

²⁶ The Board of Patent Appeals has affirmed the examiner’s grounds of rejection 71% of the time in inter partes reexaminations. Eric J. Rogers, Ten Years of Inter Partes Patent Reexamination Appeals: An Empirical View, 29 SANTA CLARA COMPUTER & HIGH TECH. L.J. 305, 330, 340 (2013). Here, the examiner has rejected the asserted claims of the ’004 Patent on multiple grounds.

claims cover, including installations with non-accused products, with only an indoor unit, or in “legacy” mode. Carrier’s injunction would also preclude Goodman from selling systems other than “ComfortNet systems” that were found to infringe at trial. (Proposed Order, D.I. 395, ¶1). For example, Carrier’s proposed injunction would bar the sale of *any* system that includes a CTK thermostat, including systems with only an indoor unit, or systems using a CTK thermostat with another manufacturer’s equipment. Carrier has not shown that any such systems infringe the patent. It should not be permitted to use the injunction to short circuit its burden of proof. Moreover, any injunction that precludes Goodman from selling the CTK thermostats, as Carrier’s proposed order would (Proposed Order, D.I. 395, ¶2), will necessarily cause undue hardship to Goodman by precluding these noninfringing uses. An injunction is not an appropriate remedy here. *Apple*, 735 F.3d at 1372.

Finally, Carrier’s proposed order requires that notice be provided to every customer that has ever purchased a ComfortNet product. (Proposed Order, D.I. 395, ¶3). That would include customers who have purchased only ComfortNet indoor and outdoor units, which by themselves cannot infringe the ’004 Patent, as well as customers who have purchased CTK thermostats with other equipment not including an outdoor unit, which also cannot infringe the ’004 Patent. The injunction framed by Carrier is overly broad for that reason too.

Carrier claims that Goodman is not harmed because it can sell manually-configured indoor and outdoor units with legacy thermostats, relying on *Douglas Dynamics*. Br. at 29. That case indicates that the balance of hardships favors the patentee where the competitor has a non-infringing alternative it can easily deliver to the market. *Douglas Dynamics*, 717 F.3d at 1345. But that factor weighs in Goodman’s favor here. Goodman cannot easily do so, as each of its products has one (or many) non-infringing use(s) (e.g., a thermostat connected to only an indoor

unit). The broad scope of Carrier's requested injunction places a heavy burden on Goodman to police which configurations its distributors, dealers, and end-users use. Such a high burden weighs against an injunction. Moreover, the injunction would preclude Goodman from offering a host of non-infringing features.²⁷ By seeking to preclude Goodman from selling communicating systems altogether, Carrier attempts to leverage the '004 Patent for competitive gain beyond that which the inventive contribution and value of that patent warrant — an approach rejected by the Federal Circuit. *Apple*, 735 F.3d at 1361.

Indeed, given the wide range of functions and applications contained within the CTK thermostats and the fact that the CTK thermostats with their full functionality can be used only with indoor units without infringing the '004 Patent, it is very difficult (if not impossible) to craft an injunction that will not encompass noninfringing uses of Goodman's equipment.

3. *Carrier Failed To Show It Will Face Any Substantial Hardship*

Carrier cannot show that it will be more harmed than Goodman. Carrier has not conducted an analysis of the market and, based on the current record, may not have lost a single sale to Goodman, much less a sale on account of the infringing feature. In a contorted exercise, Carrier urges that, because Goodman contends its sales of the ComfortNet system are insignificant, Goodman would not be harmed by the grant of an injunction. But Carrier turns the argument on its head. It is precisely because those sales are not that significant that Carrier, the reputed leader in the market, would not be harmed by allowing them to continue (subject to any compensation for infringement).

²⁷ The ComfortNet thermostats allow for a host of premium features that are simplified by digital communications, such as advanced diagnostics, wireless remote monitoring, and the use of expanded accessories. PTX 734 at ECT_0000091; PTX 926 at ECT_0000006; DTX 173 at GOODMAN-CAR00000651-652 (identifying 30 different "major features" of the CTK03 thermostat, only one of which is auto-configuration, and several accessories for use with the thermostat).

Finally, given the many players in the marketplace, Goodman's exclusion would expose it to far more harm than Carrier obtains in corresponding benefit. This is not a two-competitor market. Because at least Trane, Rheem, Lennox, York, and Nordyne also compete with Carrier, any injunction is more likely to transfer Goodman's market share to those (potentially lower-price) competitors than to Carrier. Carrier would thus fare better financially from a royalty, which would transfer the monetary benefit of the invention to it rather than competitors. That Carrier nonetheless seeks an injunction that would harm Goodman gravely and potentially benefit it little if at all speaks loudly to its motives. In any event, there is no reason to think that an injunction will benefit Carrier. But it is an unavoidable fact that barring Goodman from the market would harm Goodman.

D. Public Interest Does Not Favor Granting an Injunction

The public interest would be disserved by an injunction, for several reasons. First, the injunction would necessarily preclude the sale of non-infringing systems. The '004 Patent requires an HVAC system that includes an indoor unit, an outdoor unit, and a thermostat. PTX 1 at claim 6. However, enjoining the sale of Goodman's accused thermostats would preclude the sale of those thermostats in systems without an outdoor unit, or with units "mixed and matched" with those from other HVAC manufacturers. These HVAC systems have neither been accused — nor adjudged — of infringing. Denying the market access to these non-infringing systems is contrary to the public interest.

Second, while the accused heating and cooling devices are complex, multi-featured products, the patent addresses only one limited feature included in them. In *Apple*, the Federal Circuit held it was appropriate to "consider the scope of [the patentee's] requested injunction relative to the scope of the patented features and the prospect that an injunction would have the effect of depriving the public of access to a large number of non-infringing features." 735 F. 3d

at 1372-73. Here, Goodman's products provide the benefits of energy efficiency, ease of installation, ease of diagnostics, sound reduction, and reduced wiring — not to mention their primary functions of heating and cooling homes. *E.g.* PTX 699 at GOODMAN-CAR00126134 at 188. The requested injunction would hinder the public's access to all of those features, not simply the limited self-configuration feature the jury found infringing. Conservation of energy is a particularly important public interest, and the interest in having many high efficiency heating and cooling products available to it weighs against an injunction in this case.

Third, the U.S. PTO has rejected each of the asserted claims on multiple grounds. *MercExchange*, 500 F. Supp. 2d at 586 (“[T]he court deems it proper to consider . . . repeated indications from the PTO that such patent is invalid as obvious, when considering the public's interest in protecting the patent holder through injunctive relief.”). Granting an injunction to enforce a patent of dubious validity would thwart the public interest. *Callaway Golf Co. v. Kappos*, 802 F. Supp. 2d 678, 686 (E.D. Va. 2011).

Fourth, an injunction is not warranted at this stage given the substantial uncertainty that remains over the jury's verdict. The jury's verdict may well be overturned by this Court, or on appeal, given the substantial arguments in post-trial motions. *See* D.I. 397. Enjoining Goodman based on an uncertain verdict is not in the public interest. *See Dow Chem. Co. v. Nova Chems. Corp.*, C.A. No. 05-737-JJF, 2010 WL 3083023, at *1 (D. Del. July 30, 2010) (“Given the substantial issues for appeal . . . the Court is not persuaded that entry of a permanent injunction will serve the parties or the public interest.”).

Carrier argues that the public interest is served when innovation is protected. Br. at 30. But innovation can be protected through damages as well. And there is in any event little to no innovation associated with the '004 Patent, as auto-configuration was already in the public

domain several years before Carrier's dates of invention, *see* DTX 112 at ¶28, D.I. 403 at 814:8-20; D.I. 404 at 1043:23-1045:10; DTX 95 at 10:54-56, D.I. 404 at 1041:6-1043:22; DTX 157 at 5-52-5-53, D.I. 404 at 1041:6-1043:22, as Carrier's own expert agreed. D.I. 404 at 1176:14-16, 1175:13-1176:10. The future of innovation is not at risk, and the general interest in enforcing patents is an insufficient basis for injunctive relief in any event. *See ActiveVideo*, 694 F.3d at 1341 ("If the general public interest in upholding patent rights alone was sufficient to mandate injunctive relief when none of the other three factors support injunctive relief, then we would be back to the general rule that a patentee should always receive an injunction against infringement. But the Supreme Court rejected [that] idea.").

E. Carrier's Conduct Weighs Against Injunctive Relief

Those seeking equity must have acted equitably. *Shockley v. Arcan, Inc.*, 248 F.3d 1349, 1361 (Fed. Cir. 2001). Carrier has not acted equitably before the PTO, and it has not acted equitably before this Court. That alone justifies denying injunctive relief.

As discussed in Goodman's post-trial briefing, Carrier's improper conduct resulted in a verdict in its favor, and it now asks this Court to grant it an injunction on that basis. Carrier invoked a standard indemnity agreement as proof of intent to induce infringement, urging that "Emerson is going to pay" — even though it had no basis to make such an assertion. D.I. 397 at 18. It dredged up allegations of copying, even though copying is irrelevant to any issue in this case. D.I. 397 at 21; D.I. 405 at 1362:12-14. And it preyed on jurors' emotions by analogizing invalidation of a patent to taking away one's child. D.I. 397 at 22. This is not conduct befitting a party claiming an entitlement to equitable relief.^{28,29}

²⁸ At the very least, the Court should allow the Federal Circuit to review these issues on appeal before granting an injunction. The Court could reconsider an injunction later, after appeal, should the Court deem it appropriate.

Finally, Carrier has engaged in unwarranted conduct during '004 Patent reexaminations. Carrier hid evidence regarding the prior art from the PTO — namely, that the prior-art Varitech system was not a failure, and it was not recalled. D.I. 397 at 38-39; D.I. 222, Appendix 1 at ¶¶34-37, 58a-58b; *compare* D.I. 222, Ex. 2-A (Hughes Decl.) at ¶¶11-13 *with* D.I. 222, Ex. 2-D at 60:6-19, 71:24-72:10, 75:15-76:2, 103:16-24, 124:7-24, 141:21-142:3, 182:13-19, 183:6-184:14 *and* D.I. 399 Ex. 4 (Hughes Depo. Tr.) at 129:24 - 130:2, 132:23 - 133:7, & 155:6-10. Carrier has also attempted to delay reexamination proceedings so that this case could take precedence. *See* Section III.C, *supra*. Each and every one of those efforts was denied, and the PTO issued a stern warning that any further such petitions in '004 Patent reexamination would be denied outright and expunged. *See* Section III.C, *supra*. Again, such conduct is not becoming of a party seeking equitable relief.

V. CONCLUSION

Carrier has failed to carry its burden that an injunction is warranted in this case. The request for an injunction should be denied. Should the Court grant an injunction, Goodman requests the order be stayed pending completion of the reexamination proceedings and/or pending appeal to the Federal Circuit in this case.

²⁹ Carrier also maintained unsupported claims regarding the '452 Patent for nearly two years before dropping that patent mere months before trial. *See* D.I. 273. Carrier is not entitled to equitable injunctive relief given its conduct in maintaining unsupported claims through two years of this litigation, even though they were later dropped. *See Avid Identification Sys., Inc. v. Phillips Elecs. N. Am. Corp.*, No. 2:04-cv-183, 2008 WL 819962, at *4 (E.D. Tex. Mar. 25, 2008) (patentee's inequitable conduct as to one patent created unclean hands that supported denying a permanent injunction as to other patents).

OF COUNSEL:

Scott F. Partridge
Paul R. Morico
Elizabeth Durham Flannery
Ali Dhanani
Lisa Maria Thomas
Michelle J. Eber
BAKER BOTTS L.L.P.
One Shell Plaza
910 Louisiana Street
Houston, Texas 77002
(713) 229-1569

Dated: November 12, 2014

/s/ Frederick L. Cottrell, III

Frederick L. Cottrell, III (#2555)
Jason J. Rawnsley (#5379)
RICHARDS, LAYTON & FINGER, P.A.
920 North King Street
Wilmington, DE 19801
(302) 651-7700
cottrell@rlf.com
rawnsley@rlf.com

*Attorneys for Defendants Goodman Global,
Inc., Goodman Manufacturing Company,
L.P., Goodman Global Holdings, Inc.,
Goodman Distribution, Inc., & Goodman
Sales Company*

CERTIFICATE OF SERVICE

I hereby certify that on November 12, 2014, I caused the foregoing to be electronically filed with the Clerk of the Court using CM/ECF, which will send notification of such filing to registered participants, and further certify that I caused copies of the foregoing document to be served upon the following via electronic mail:

Jack B. Blumenfeld (#1014)
Maryellen Noreika (#3208)
MORRIS, NICHOLS, ARSHT & TUNNELL LLP
1201 North Market Street
P.O. Box 1347
Wilmington, DE 19899
(302) 658-9200
mnatcarrierservice@list.mnat.com

Attorneys for Plaintiff Carrier Corp.

Gregg F. LoCascio, P.C.
Sean M. McEldowney
Katharine M. Burke
Joseph Edell
Anders P. Fjellstedt
Abigail E. Lauer
KIRKLAND & ELLIS LLP
655 15th Street N.W., Suite 1200
Washington, D.C. 20005
#Carrier-Goodman@kirkland.com

Attorneys for Plaintiff Carrier Corp.

/s/ Jason J. Rawnsley

Jason J. Rawnsley (#5379)
rawnsley@rlf.com